

passages as will make it clear that he deserves the credit which has been assumed by those who have merely *repeated his observations*. On page 430, 'Comptes Rendus,' he says, "Ainsi le *spicule* ou *dard*, figuré dans l'intérieur du sac par M. Corda (*calcareo sagitta*, Corda), et représenté saillant au dehors par M. Ehrenberg, dans sa planche 2. fig. 7 *b*, n'est autre que l'espèce de calice basilaire à trois points en étoile, des prétendus hameçons. Le long filament grêle qui part de ce calice étoilé était, avant l'évolution, invaginé en dedans de lui-même et du calice ou spicule par un *retournement en doigt de gant*, et formait au fond du sac cette apparence de coussin que M. Corda a nommé *vesica patelliformis*; un examen attentif et d'excellents instruments font même reconnaître dans ce coussin sa composition par un fil enroulé en spirale." On page 431 he speaks of the evolution of the thread of this and another smaller netting-cell by *ensheathing itself*: "des corpuscules plus petits et surtout beaucoup plus étroits que les précédents, ovoïdes, à parois épaisses contenant à leur intérieur un fil enroulé en spirale, qui sort comme le long filament des hameçons, en s'engageant en dedans de lui-même." All that I have been able to add to this, although the subject has been pursued with the utmost rigour, and with the best lenses to be had, is the description of the relation of the coiled thread to that part of its base which projects straight into the cavity of the cell. Perhaps the greatest importance that can be attached to this is that it is the most difficult to make out. However, the discovery of this feature solves the whole mechanism of the organ. Although I had, in 1860, figured and briefly indicated (Agassiz's 'Contributions' *ut supra*) this part of its structure, yet it was not until the fourth volume of the 'Contributions' appeared, in 1862, that I described it, in full, as I had seen it in various animals, viz. in the ephyra of *Aurelia flavidula* (p. 44), the Hydra form of *Coryne mirabilis* (p. 209), *Actinia marginata* (p. 210), and *Hydractinia polyclina* (p. 237). At first sight, I might seem to be anticipated in this by Gosse, in his 'Evenings with the Microscope,' London, 1859, or in his 'Actinologia Britannica,' London, 1860, p. xxix, Introduction, and pl. 11. fig. 6; but, upon examination of the illustration, I find nothing to justify it; and, from the description in connexion with the figure, I should judge that the cnidæ had been injured and distorted by pressure. However, I leave it to others to decide whether Gosse's description is sufficient to clear up the subject on this point.

Among the Ctenophoræ the cnidæ are so numerous and so closely packed together, as to form a uniform layer all over the surface of the tentacle totally outside of the exterior wall.—H. J. C.]

#### On the Writings of C. S. RAFINESQUE.

To the Editors of the *Annals and Magazine of Natural History*.

GENTLEMEN,—Will you allow me to state, for the information of your readers, that a long-desired work is about to be accomplished in Philadelphia, namely, the reproduction of the complete writings of Constantine Smaltz Rafinesque on Recent and Fossil Conchology, to be edited by W. G. Binney and G. W. Tryon, Jun. This indus-

trious naturalist, first established in Sicily, and four of whose works on the natural history of that island were published at Palermo in 1810-1815, removed, about the year 1817, to the United States. During his residence there, he worked assiduously on the natural history of the States, which were almost virgin ground—chiefly the plants and fishes. As yet, none of their famed river mollusks had been described, and M. Rafinesque sent to Europe in 1820, for publication in the ‘*Annales Générales des Sciences Physiques*’ of Brussels, a paper entitled “*Monographie des Coquilles bivalves fluviatiles de la rivière Ohio, contenant douze genera et soixante-huit espèces.*” Here is an instance in which as many as sixty-eight species of the North-American river shells, including all the principal species, were described for the first time, so recently as 1820, in a work of scientific authority; and yet they have been passed over by American writers as not being sufficiently clear for identification. But if the descriptions of the whole sixty-eight are not clear enough, there can be no mistake about the majority of them; and I am happy to say that, in a monograph of the genus *Unio* (now in course of publication in the ‘*Conchologia Iconica*’), I hope, with the assistance of Mr. Anthony, of Cambridge, Massachusetts, to succeed in restoring the priority of most of M. Rafinesque’s names.

I have been led to offer this communication, not only for the sake of making the acceptable announcement of the forthcoming publication of Messrs. Binney and Tryon’s reprint, but with the view of upholding an important principle in nomenclature, which appears to be much too readily cast aside. In Mr. P. P. Carpenter’s paper “*On Mollusca of the West Coast of North America*” (Brit. Assoc. Reports for 1863, p. 677) occurs the following passage:—

“It is unfortunate that in the two most important branches of North-American freshwater mollusks, the Melaniadæ and the Unionidæ, there exists a radical difference of opinion between the leading writers, which has sometimes assumed the appearance of personal animosity. Malacologists east of the Atlantic, unwilling to become partisans where the leading nomenclators of the rival schools are equally honoured, have to a great extent declined to pay attention to the unexhausted riches of the American waters, regarding any settlement of the disputed points as hopeless. Dr. Isaac Lea, who has spared no expense in illustrating his publications of the results of a lifelong study, follows the restrictions on the priority-rule allowed by the British Association Committee. Other writers, however, claim a certainty in identifying the supposed species of Rafinesque and other similarly inaccurate authors, which would be considered by most English naturalists as not warranted by the few loose words of description given. It would be well if the student were permitted to start from the first carefully ascertained land-mark, rather than from the defaced tracks of the first hunter.”

On the principle involved in this passage, many of the tracks of the hunter Linnæus must be regarded as being defaced, and probably one-half of the species of the ‘*Systema Naturæ*’ would have to be set aside. I am, Gentlemen, your obedient Servant,

Sutton, Heston, Oct. 2, 1864.

LOVELL REEVE.